

HORSE COAT COLOR / PATTERN TEST REPORT

<i>Provided Information:</i>		<i>Case:</i>	NQ126765
<i>Name:</i>	RAMBLING COLORS	<i>Date Received:</i>	11-Jul-2025
<i>Registration:</i>	11300308	<i>Report Issue Date:</i>	16-Jul-2025
		<i>Report ID:</i>	7187-7510-0042-2179
		Verify report at vgl.ucdavis.edu/verify	
<i>DOB:</i> 04/15/2013 <i>Sex:</i> Mare <i>Breed:</i> Spotted Saddle Horse			

RESULT		INTERPRETATION	RESULT		INTERPRETATION
RED FACTOR	E/E	No red factor detected. Offspring cannot be chestnut/sorrel.	SPLASHED WHITE (SW1, SW3, SW5, SW6, SW7, SW8)	N/N	No copies of MITF Splashed White detected.
AGOUTI	a/a	If present, black pigment is distributed uniformly over the body.	SPLASHED WHITE (SW2, SW4)	N/N	No copies of PAX3 Splashed White detected.
CREAM	N/Cr	1 copy of Cream dilution detected.	TOBIANO	TO/TO	2 copies of Tobiano detected.
PEARL	N/N	No copies of Pearl dilution detected.	LEOPARD	N/N	No copies of Leopard Complex detected.
SILVER	N/N	No copies of Silver dilution detected.	PATTERN-1	N/N	No copies of PATN1 detected.*
DUN	nd2/nd2	Horse is not Dun dilute. Primitive markings are absent.	BRINDLE 1		Not requested.
CHAMPAGNE	N/N	No copies of Champagne dilution detected.	TIGER EYE		Not requested.
LETHAL WHITE OVERO	N/N	No copies of lethal white overo detected.	MUSHROOM (SHETLAND PONY)		Not requested.
SABINO 1	N/N	No copies of Sabino 1 detected.	GRAY PRESENCE OR ABSENCE	Absent	Gray variants were not detected. Horse will not gray.
DOMINANT WHITE (W5, W10, W13, W20, W22)	N/N	No copies of W5, W10, W13, W20 or W22 detected.	ROAN		Not requested.

HORSE COAT COLOR / PATTERN TEST REPORT

Client/Owner/Agent Information: SHERI HANSON 1901 BLACK CANYON RD CRAWDORD, CO 81415	Case: NQ126765 Date Received: 11-Jul-2025 Report Issue Date: 16-Jul-2025 Report ID: 7187-7510-0042-2179 Verify report at vgl.ucdavis.edu/verify
Name: RAMBLING COLORS	

Additional Information

If testing for a disease or a disorder was performed and results indicate the animal is affected or at risk, we recommend contacting your veterinarian for further clinical evaluation and for additional information on disease and management.

For more detailed information on Coat Color test results, please visit our website at:
vgl.ucdavis.edu/resources/horse-coat-color

*Pattern-1: In order for high levels of white spotting to be visible on horses that inherit PATN1, LP must also be present.

License Information

Tests for Tobiano are performed under license.

For terms and conditions of testing, please see vgl.ucdavis.edu/about/terms-and-conditions

Results are determined using PCR-based methods. The results relate only to the sample tested as identified by the submitter (for example, identity and/or breed).

Report authorized by Dr. Rebecca Bellone, VGL Director

Veterinary Genetics Laboratory · University of California Davis · One Shields Ave · Davis, CA 95616
vgl.ucdavis.edu · (530) 752-2211

Red Factor and Agouti

Horse coat color depends on many genes. There are two known genes that contribute to a horse's base color, namely Agouti (also known as Agouti Signaling Protein or *ASIP* for short) and Red Factor (also known as extension or *MC1R*).

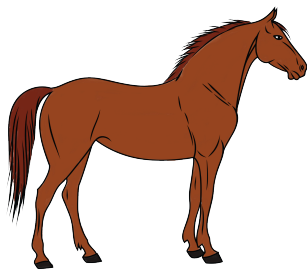
Genetic variation at the Agouti and Red Factor loci work together to determine the base coat color as well as the color of a horse's points (mane, tail, lower legs, and ear rims). Together these genes determine if a horse is chestnut/sorrel (shade of red body and red points), bay (shade of red body with black points), or black (black body and black points).

Agouti controls the distribution of black pigment, and alleles of this gene determine whether a horse will have a bay or black base coat color. The dominant **A** allele restricts black to the points. To read more about Agouti, visit <https://vgl.ucdavis.edu/test/agouti-horse>.

Red factor is responsible for determining whether a horse will have a chestnut base coat color or not. Horses with two recessive alleles (e or e^a) will be chestnut regardless of the genotype at the agouti locus. Horses with at least one dominant allele (E) will not be chestnut, and whether they are bay or black is dependent on the genotype at the agouti locus. To read more about Red Factor, visit <https://vgl.ucdavis.edu/test/red-factor-horse>.

Genotype results for Agouti and Red Factor can be helpful in predicting breeding outcomes.

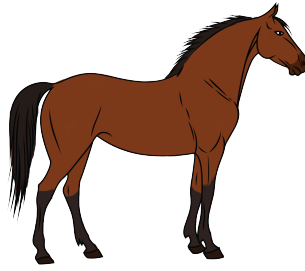
Please note that additional known and yet unknown genes influence shade, dilution, and white patterning, and ultimately the overall coat color phenotype observed.



Chestnut or Sorrel

Possible genotypes:

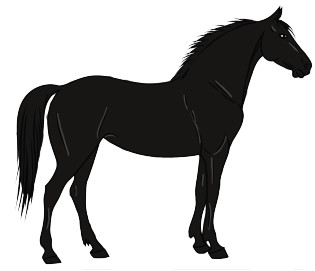
e/e A/a
e/e A/A
e/e a/a



Bay

Possible genotypes:

E/e A/a
E/e A/A
E/E A/a
E/E A/A



Black

Possible genotypes:

E/e a/a
E/E a/a

For more on horse coat color visit. <https://vgl.ucdavis.edu/resources/horse-coat-color>.